

Claims

[c1] An apparatus for conserving hot water usage in a plumbing installation, comprising:

- A means of diverting incoming hot water into a local storage tank when the temperature of said water is below a desired temperature;
- A means of delivering said stored water from the local storage tank to the cold-water side of the plumbing installation when cold water is called for;
- A means of setting the temperature below which hot water will be diverted into the storage tank;
- Sensors for monitoring the water level in the storage tank;
- A microprocessor for controlling the water-saving process.

[c2] An apparatus for conserving cold water usage in a plumbing installation, comprising:

- A means of diverting incoming cold water into a local storage tank when the temperature of said water is above a desired temperature;
- A means of delivering said stored water from the local storage tank to the hot-water side of the

plumbing installation when hot water is called for;

- A means of setting the temperature above which cold water will be diverted into the storage tank;
- Sensors for monitoring the water level in the storage tank;
- A microprocessor for controlling the water-saving process.

- [c3] An apparatus of both claim 1 and claim 2.
- [c4] An apparatus of claim 1 or claim 2, or an apparatus of both claim 1 and claim 2, wherein the storage tank changes size depending on the quantity of water stored within it.
- [c5] An apparatus of claim 1 or claim 2, or an apparatus of both claim 1 and claim 2, and which is installed in:
 - a sink, lavatory, bath or shower;
 - a household appliance, such as a dishwasher or clothes washer;
 - a carwash, a commercial processing machine, or machine tool.
- [c6] An apparatus of claim 1 or claim 2, or an apparatus of both claim 1 and claim 2, and which is DC powered, and which is recharged by means of energy induced by or generated from water flow through the apparatus.

